UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Box 1450 Alexandria, Virginia 22313-1450 www.uspto.gov

NOTICE OF ALLOWANCE AND FEE(S) DUE

38834

05/14/2008

WESTERMAN, HATTORI, DANIELS & ADRIAN, LLP 1250 CONNECTICUT AVENUE, NW SUITE 700 WASHINGTON, DC 20036

EXAMINER					
PEACE, RHONDA S					
ART UNIT	PAPER NUMBER				

2874 DATE MAILED: 05/14/2008

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/580,420	02/08/2007	Tsuyoshi Chiba	062549	1962

TITLE OF INVENTION: POLARIZING PLATE PROVIDED WITH OPTICAL COMPENSATION LAYERS AND IMAGE DISPLAY APPARATUS

USING THE SAME

APPLN. TYPE	SMALL ENTITY	ISSUE FEE DUE	PUBLICATION FEE DUE	PREV. PAID ISSUE FEE	TOTAL FEE(S) DUE	DATE DUE
nonprovisional	NO	\$1440	\$300	\$0	\$1740	08/14/2008

THE APPLICATION IDENTIFIED ABOVE HAS BEEN EXAMINED AND IS ALLOWED FOR ISSUANCE AS A PATENT. PROSECUTION ON THE MERITS IS CLOSED. THIS NOTICE OF ALLOWANCE IS NOT A GRANT OF PATENT RIGHTS. THIS APPLICATION IS SUBJECT TO WITHDRAWAL FROM ISSUE AT THE INITIATIVE OF THE OFFICE OR UPON PETITION BY THE APPLICANT. SEE 37 CFR 1.313 AND MPEP 1308.

THE ISSUE FEE AND PUBLICATION FEE (IF REQUIRED) MUST BE PAID WITHIN THREE MONTHS FROM THE MAILING DATE OF THIS NOTICE OR THIS APPLICATION SHALL BE REGARDED AS ABANDONED. THIS STATUTORY PERIOD CANNOT BE EXTENDED. SEE 35 U.S.C. 151. THE ISSUE FEE DUE INDICATED ABOVE DOES NOT REFLECT A CREDIT FOR ANY PREVIOUSLY PAID ISSUE FEE IN THIS APPLICATION. IF AN ISSUE FEE HAS PREVIOUSLY BEEN PAID IN THIS APPLICATION (AS SHOWN ABOVE), THE RETURN OF PART B OF THIS FORM WILL BE CONSIDERED A REQUEST TO REAPPLY THE PREVIOUSLY PAID ISSUE FEE TOWARD THE ISSUE FEE NOW DUE.

HOW TO REPLY TO THIS NOTICE:

I. Review the SMALL ENTITY status shown above.

If the SMALL ENTITY is shown as YES, verify your current **SMALL ENTITY status:**

A. If the status is the same, pay the TOTAL FEE(S) DUE shown

B. If the status above is to be removed, check box 5b on Part B -Fee(s) Transmittal and pay the PUBLICATION FEE (if required) and twice the amount of the ISSUE FEE shown above, or

If the SMALL ENTITY is shown as NO:

A. Pay TOTAL FEE(S) DUE shown above, or

B. If applicant claimed SMALL ENTITY status before, or is now claiming SMALL ENTITY status, check box 5a on Part B - Fee(s) Transmittal and pay the PUBLICATION FEE (if required) and 1/2 the ISSUE FEE shown above.

II. PART B - FEE(S) TRANSMITTAL, or its equivalent, must be completed and returned to the United States Patent and Trademark Office (USPTO) with your ISSUE FEE and PUBLICATION FEE (if required). If you are charging the fee(s) to your deposit account, section "4b" of Part B - Fee(s) Transmittal should be completed and an extra copy of the form should be submitted. If an equivalent of Part B is filed, a request to reapply a previously paid issue fee must be clearly made, and delays in processing may occur due to the difficulty in recognizing the paper as an equivalent of Part B.

III. All communications regarding this application must give the application number. Please direct all communications prior to issuance to Mail Stop ISSUE FEE unless advised to the contrary.

IMPORTANT REMINDER: Utility patents issuing on applications filed on or after Dec. 12, 1980 may require payment of maintenance fees. It is patentee's responsibility to ensure timely payment of maintenance fees when due.

PART B - FEE(S) TRANSMITTAL

Complete and send this form, together with applicable fee(s), to: Mail Mail Stop ISSUE FEE

Commissioner for Patents P.O. Box 1450 Alexandria, Virginia 22313-1450

or Fax (571)-273-2885

ap in m

appropriate. All further	correspondence including ed below or directed oth	ng the Patent, advance o	rders and notification of n	naintenance fees w	ill be	mailed to the current	correspondence address as arate "FEE ADDRESS" for
		ock 1 for any change of address)	Fee(s) Transmittal. This ers. Each additional	s certif paper	icate cannot be used f	r domestic mailings of the or any other accompanying nt or formal drawing, must
1250 CONNEC SUITE 700	N, HATTORI, DA FICUT AVENUE, I	^{/2008} NIELS & ADRIA NW	NILP Lbe	Cert	ificate	of Mailing or Trans	mission g deposited with the United st class mail in an envelope above, or being facsimile ate indicated below.
WASHINGTON	N, DC 20036						(Depositor's name)
							(Signature)
							(Date)
APPLICATION NO.	FILING DATE		FIRST NAMED INVENTOR		ATTO:	RNEY DOCKET NO.	CONFIRMATION NO.
10/580,420 TITLE OF INVENTION USING THE SAME	02/08/2007 N: POLARIZING PLAT	TE PROVIDED WITH (Tsuyoshi Chiba OPTICAL COMPENSATI	ON LAYERS AN	D IMA	062549 AGE DISPLAY APP.	1962 ARATUS
APPLN. TYPE	SMALL ENTITY	ISSUE FEE DUE	PUBLICATION FEE DUE	PREV. PAID ISSUE	FEE	TOTAL FEE(S) DUE	DATE DUE
nonprovisional	NO	\$1440	\$300	\$0		\$1740	08/14/2008
EXAM	IINER	ART UNIT	CLASS-SUBCLASS				
PEACE, R	HONDA S	2874	349-119000				
"Fee Address" ind PTO/SB/47; Rev 03-0 Number is required. 3. ASSIGNEE NAME A	ND RESIDENCE DATA less an assignee is ident h in 37 CFR 3.11. Comp	"Indication form led. Use of a Customer A TO BE PRINTED ON	(I) the names of up to or agents OR, alternative (2) the name of a single registered attorney or a 2 registered patent attolisted, no name will be THE PATENT (print or type data will appear on the port a substitute for filing and (B) RESIDENCE: (CITY)	rely, e firm (having as a gent) and the name meys or agents. If reprinted. e) atent. If an assigneassignment.	memb es of up no nam	er a 2 o to e is 3	ocument has been filed for
Please check the appropriate 4a. The following fee(s).			rinted on the patent):				oup entity Government Shown above)
Publication Fee (N	No small entity discount p		Payment by credit car The Director is hereby	authorized to chars	ge the i	equired fee(s), any de	ficiency, or credit any n extra copy of this form).
* *	s SMALL ENTITY state	is. See 37 CFR 1.27.	☐ b. Applicant is no longed from anyone other than t				FR 1.27(g)(2). The assignee or other party in
interest as shown by the	records of the United Sta	tes Patent and Trademark	« Office.			, , ,	
	nation is required by 37 C tiality is governed by 35 d application form to the ions for reducing this bu Virginia 22313-1450. DO			_			I by the USPTO to process) g gathering, preparing, and me you require to complete artment of Commerce, P.O. for Patents, P.O. Box 1450,

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it displays a valid OMB control number.



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Box 1450

P.O. Box 1450 Alexandria, Virginia 22313-1450 www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.	
10/580,420	02/08/2007	Tsuyoshi Chiba	062549	1962	
38834 7590 05/14/2008		EXAMINER			
WESTERMAN,	HATTORI, DANIEI	PEACE, RHONDA S			
	CUT AVENUE, NW		ART UNIT	PAPER NUMBER	
SUITE 700 WASHINGTON, DC 20036		2874			

Determination of Patent Term Adjustment under 35 U.S.C. 154 (b)

(application filed on or after May 29, 2000)

The Patent Term Adjustment to date is 36 day(s). If the issue fee is paid on the date that is three months after the mailing date of this notice and the patent issues on the Tuesday before the date that is 28 weeks (six and a half months) after the mailing date of this notice, the Patent Term Adjustment will be 36 day(s).

If a Continued Prosecution Application (CPA) was filed in the above-identified application, the filing date that determines Patent Term Adjustment is the filing date of the most recent CPA.

Applicant will be able to obtain more detailed information by accessing the Patent Application Information Retrieval (PAIR) WEB site (http://pair.uspto.gov).

Any questions regarding the Patent Term Extension or Adjustment determination should be directed to the Office of Patent Legal Administration at (571)-272-7702. Questions relating to issue and publication fee payments should be directed to the Customer Service Center of the Office of Patent Publication at 1-(888)-786-0101 or (571)-272-4200.

	Application No.	Applicant(s)
	10/580,420	CHIBA ET AL.
Notice of Allowability	Examiner	Art Unit
	Rhonda S. Peace	2874
The MAILING DATE of this communication appe All claims being allowable, PROSECUTION ON THE MERITS IS herewith (or previously mailed), a Notice of Allowance (PTOL-85)	ears on the cover sheet with the o	correspondence address oplication. If not included
NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RI of the Office or upon petition by the applicant. See 37 CFR 1.313	GHTS. This application is subject	
1. This communication is responsive to the application filed 2.	<u>/8/2007</u> .	
2. ☑ The allowed claim(s) is/are <u>1-20</u> .		
 Acknowledgment is made of a claim for foreign priority un a) ☐ All b) ☐ Some* c) ☐ None of the: 		
 Certified copies of the priority documents have 		
2. Certified copies of the priority documents have	• • • • • • • • • • • • • • • • • • • •	
Copies of the certified copies of the priority do	cuments have been received in this	national stage application from the
International Bureau (PCT Rule 17.2(a)).		
* Certified copies not received:		
Applicant has THREE MONTHS FROM THE "MAILING DATE" on noted below. Failure to timely comply will result in ABANDONM THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.		complying with the requirements
4. A SUBSTITUTE OATH OR DECLARATION must be submit INFORMAL PATENT APPLICATION (PTO-152) which give		
5. CORRECTED DRAWINGS (as "replacement sheets") mus	t be submitted.	
(a) 🔲 including changes required by the Notice of Draftspers	on's Patent Drawing Review(PTC	9-948) attached
1) 🔲 hereto or 2) 🔲 to Paper No./Mail Date		
(b) \prod including changes required by the attached Examiner's	s Amendment / Comment or in the	Office action of
Paper No./Mail Date		
Identifying indicia such as the application number (see 37 CFR 1. each sheet. Replacement sheet(s) should be labeled as such in the		
 DEPOSIT OF and/or INFORMATION about the deposit attached Examiner's comment regarding REQUIREMENT I 		
Attachment(s) 1. ☑ Notice of References Cited (PTO-892)	5. ☐ Notice of Informal l	Patent Application
2. ☐ Notice of Draftperson's Patent Drawing Review (PTO-948)	6. ☐ Interview Summary	
	Paper No./Mail Da	ate
 Information Disclosure Statements (PTO/SB/08), Paper No./Mail Date <u>See Continuation Sheet</u> 	7. 🗌 Examiner's Amend	ment/Comment
Examiner's Comment Regarding Requirement for Deposit of Biological Material		ent of Reasons for Allowance
	9.	
	/Rhonda S. Peace/ Exam /Michelle R. Connelly-Cus	iner, AU 2874 hwa/ Primary Examiner, AU 2874

Continuation of Attachment(s) 3. Information Disclosure Statements (PTO/SB/08), Paper No./Mail Date: 5/22/2006 and 12/12/2007.

DETAILED ACTION

Priority

Receipt is acknowledged of papers submitted under 35 U.S.C. 119(a)-(d), which papers have been placed of record in the file.

Information Disclosure Statement

The information disclosure statements (IDS) submitted on 5/22/2006 and 12/12/2007 were in compliance with the provisions of 37 CFR 1.97. Accordingly, the information disclosure statements are being considered by the examiner.

Allowable Subject Matter

Claims 1-20 are allowed.

The following is an examiner's statement of reasons for allowance: The applicable prior art does not disclose or reasonably suggest a polarizing plate comprising, in this stated order, a polarizer, a first compensation layer, a second compensation layer, and a third compensation layer. The first optical compensation layer contains a resin having an absolute value of photoelastic coefficient of 2×10^{-11} m²/N or less, and has a relationship of nx > ny = nz and an in-plane retardation Re_1 of 200 to 300 nm; the second optical compensation layer contains a resin having an absolute value of photoelastic coefficient of 2×10^{-11} m²/N or less, and has a relationship of nx > ny = nz and an in-plane retardation Re_2 of 90 to 160 nm; and the third optical compensation layer has a relationship of nx = ny > nz, an in-plane retardation Re_3 of 0 to 20 nm, and a thickness direction retardation Rth_3 of 30 to 300 nm. An absorption axis of the polarizer and a slow axis of the first optical compensation

Art Unit: 2874

layer forms an angle of 10 degrees to 30 degrees; an absorption axis of the polarizer and a slow axis of the second optical compensation layer forms an angle of 70 degrees to 95 degrees; and an absorption axis of the polarizer and a slow axis of the third optical compensation layer forms an angle of 70 degrees to 95 degrees. Note: nx, ny, nz, Re, Rth, and the designation of subscripts attached to a term are specifically defined in paragraph 0017 of the current specification.

Page 3

Polarizing plates having a plurality of optical compensating films and a polarizer are well-known in the art. However, no prior art discloses or suggests such a plate having the specific combination as recited above. For example, Hayashi et al (US 6,624,862) discloses a polarizing plate, as seen in Figure 22, comprising a polarizer 9, first compensating layer 10, second compensating layer 11, and third compensating layer 18. as also seen in Figure 22 of Hayashi et al, an absorption axis x of the polarizer 9 and a slow axis of the first optical compensation layer 10 forms an angle of 9.8 degrees; an absorption axis x of the polarizer 9 and a slow axis of the second optical compensation layer 11 forms an angle of 90.9 degrees; and an absorption axis x of the polarizer 9 and a slow axis of the third optical compensation layer 18 forms an angle of 91.5 degrees. See col. 20 lines 44-62. However, Hayashi et al does not disclose or reasonably suggest the first optical compensation layer contains a resin having an absolute value of photoelastic coefficient of 2 x 10⁻¹¹ m²/N or less, and has a relationship of nx > ny = nz and an in-plane retardation Re_1 of 200 to 300 nm; the second optical compensation layer contains a resin having an absolute value of photoelastic coefficient of 2 x 10^{-11} m²/N or less, and has a relationship of nx > ny = nz

and an in-plane retardation Re_2 of 90 to 160 nm; and the third optical compensation layer has a relationship of nx = ny > nz, an in-plane retardation Re_3 of 0 to 20 nm, and a thickness direction retardation Rth_3 of 30 to 300 nm. The current invention is considered patentable over Hayashi et al due to its unique combination of limitations regarding the photoelastic coefficient of the first and second layers, the refractive index relationship and in-plane retardation of the first second and third layers, Rth_3 of the third layer, in combination with the required angular relationship between each of said layers and the polarizer.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Conclusion

The following art made of record and not relied upon is considered pertinent to applicant's disclosure: Okumura (US 7,126,657), Ono et al (US 7,012,663), Miyachi et al (US 6,922,222), Kawamoto et al (US 6,888,599), Nakayama et al (US 2007/0076155 A1), Murakami et al (US 2006/0268208 A1), Murakami et al (US 2006/0238681), and Nakamura et al (US 2002/0080310 A1).

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Rhonda S. Peace whose telephone number is (571)272-8580. The examiner can normally be reached on M-F (8-5).

Application/Control Number: 10/580,420 Page 5

Art Unit: 2874

273-8300.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Rodney Bovernick can be reached on (571) 272- 2344. The fax phone number for the organization where this application or proceeding is assigned is 571-

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Rhonda S. Peace/ Examiner, Art Unit 2874

> /Michelle R. Connelly-Cushwa/ Primary Examiner, Art Unit 2874 May 10, 2008